

Death Valley Ranch Service Station/Gas Tank House
Death Valley National Monument
Inyo County
California

HABS No. CA-2257 G

HABS
CAL.
14-DVNM,
1-G-

REDUCED COPY OF MEASURED DRAWING

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HAB5
CAL,
14-DYNN,
1-G.

HISTORIC AMERICAN BUILDINGS SURVEY

DEATH VALLEY RANCH SERVICE STATION/GAS TANK HOUSE
(Scotty's Castle, Service Station/Gas House)

HABS No. CA-2257 G

Location: National Park Service Route 5 (commonly known as the North Highway), 25 miles west of the junction of US Route 95 with Nevada State Route 267 (commonly known as Scotty's Junction), Death Valley National Monument, Inyo County, California.

Present Owner: National Park Service.

Present Use: Exhibit room, Death Valley Natural History Association Book Shop and storage space.

Significance: A large part of Albert Johnson's program for Death Valley Ranch centered around his desire for complete comfort and self sufficiency in an otherwise harsh and normally depriving environment. Johnson was a collector of automobiles and owned a small fleet of trucks. That, combined with the lack of any conveniently located facilities nearby, created a need for a building devoted to auto service and refueling.

Propane and Natural Gas were new developments in the 1920s. "Rock-Gas" was one of several names under which this form of natural gas was marketed. Because of his engineering background and preoccupation with new technologies, Johnson was quick to join the many ranks of people switching from coal to natural gas for home heating and cooking. His plans included supplying at least two kitchens with it; one for Mrs. Johnson and one for Scott, and heating at least the Main House, Guest House and Cook House with this newly developed fuel.

PART I. HISTORICAL INFORMATION

Note: For general information on the Death Valley Ranch complex, see HABS No. CA-2257.

A. Physical History:

1. Date of Erection:

November 1927 - Excavation for the gas tanks was completed.¹

January 1928 - Grading of the site began.²

By December 1928 - The basic structure was completed.³

February 1929 - The doors for the Service Station were made and the concrete floor for the Gas House was poured.⁴

June 1929 - The doors of the "Rock-Gas Room" were hung.⁵

DEATH VALLEY RANCH SERVICE
STATION/GAS TANK HOUSE
HABS No. CA-2257 C (Page 2)

November 1929 - The "Rock-Cas" tanks were installed.⁶
March 1930 - The landscaping of the area between the Cook House and the Cas House had been started.⁷
April 1930 - Gasoline Tanks were lowered into pit.⁸
January 1931 - The concrete wall to the east was poured.⁹

2. Architect: Charles Alexander MacNeilledge.

3. Original and Subsequent Owners:

Albert Mussey Johnson (1927-1948).
The Gospel Foundation (1948-1970).
National Park Service (1970-Present).

4. Builder, Supplier, Manufacturer, etc:

General Superintendent - M. Roy Thompson.
Building Superintendent - H.B. Brown - (1927-1930).
C.C. Johnson - (1930-1931).

Supplier of "Rock-Cas" - Imperial Gas Co., Long Beach, CA.
Manufacturers of gas pumps - Boyle-Dayton Co., Los Angeles, CA.
Manufacturer of gas tanks - Union Tank and Pipe Co., Ltd., Los Angeles, CA.

5. Original plans and construction: Early plans and design studies depict the combination Service Station and Gas Tank House as one of a series of buildings known collectively as the Westerly Development or West Patio.¹⁰

In 1928 MacNeilledge prepared a revised design for the Service Station/Gas Tank House. The new plans located the structure directly east of the Main House and south of the Cook House. The Service Station was built to service not only the many cars and trucks that Johnson owned, but those of his many visitors and guests. It was also meant to supply all vehicles with gasoline.

The Cas Tank House was constructed to house four 32" x 120" tanks of "Rock-Cas." "Rock-Cas" was a commercial name for an early form of natural gas, similar to propane. This fuel was to be used for heating and cooking.

The gas tanks were connected underground to a service station island immediately west of the Garage. The island included two gas pumps and a small enclosed office. The entirety was covered by a gable roof supported by wooden posts and brackets covered with red clay tile. The pumps had been removed at some point and when the NPS took ownership of the castle they restored them to their original location.¹¹

DEATH VALLEY RANCH SERVICE
STATION/GAS TANK HOUSE
HABS No. CA-2257 G (Page 3)

6. Alterations and additions: In 1931 plans were drawn up to connect the Service Station/Gas Tank House with the Main House through an underground tunnel that would surface northwest of the building.¹² Construction began soon thereafter and was completed before the summer of 1931.¹³

Two large additions were made by the Gospel Foundation in 1955 in order to accommodate the building's use as a snack bar and concession area. Two rectangular rooms were added to the southwest and northeast of the earlier structure, more than doubling the previous floor space. It seems that the Gospel Foundation roofed the room to the northwest, which was left open when construction stopped.¹⁴ The Gospel Foundation used the Service Station as a kitchen for a snack bar. A large stovepipe fitting made of wood in the back wall, now filled with plywood, was built at this time. The addition in front contained some seating for patrons and a bookstore. The Foundation put a rock exhibit in the Gas Tank House and the room behind. Shelving was added in a part of the tunnel below for storage.¹⁵ The underground gas tanks were filled with sand to prevent the fumes from escaping.¹⁶

In 1979 the building was remodeled by the NPS to display interpretive exhibits about the history and construction of Scotty's Castle.

The specially designed doors for both the Gas Tank House and the Service Station have been removed, probably at the time the additions were constructed, and are now stored in the Barn. The two original wooden gas tank stands are now in the covered driveway area of the Barn. One of the original tanks with large stencilled letters spelling "ROCK-GAS" is also kept over by the Barn.

B. Historical Context:

At the same time the Service Station/Gas House was being constructed, Johnson was overseeing the construction of a Rayon factory in Burlington, North Carolina, of which he was a major investor. The factory also involved a great deal of tank preparation. What Johnson witnessed in terms of the treatment of the tanks before they were placed underground motivated him to send detailed instructions to Thompson on preparatory procedures in regards to the gas tanks at the Ranch.¹⁷

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural Character: The wood-frame additions by the Cospel Foundation dominate and effectively block from view from the south of the original Service Station/Gas Tank House built in 1931 by Albert Johnson. The additions are rectangular in plan, lower in height than the earlier structure, and have novelty siding and asphalt-shingle roofing. Their burgundy color clashes with the brown and beige stucco treatment of the original structures.

The original Service Station is square in plan, has a hip roof and rises above the other parts of the structure. A bird loft made of multi-colored ceramic tile is situated at the roof's peak. The original Gas Tank House is rectangular in plan and has a gable roof whose two slopes are of uneven length.

2. Condition of Fabric: Good.

B. Description of Exterior:

1. Over-all dimensions: 44' x 32'.
2. Foundations: Concrete.
3. Wall construction, finish, color:

Service Station/Gas Tank House: Concrete walls with brown and beige stucco finish.

Additions: Wood frame and novelty siding painted a burgundy color.

4. Structural system, framing:

Service Station/Gas Tank House: Concrete walls, wood-framed roof.

Additions: Wood-frame walls and ceiling.

5. Openings:

- a. Doorways and doors: Original Service Station/Gas Tank House Doors were removed, probably when the additions were built. The entrance to the Gas Tank House has been infilled with plywood and the entrance to the Service Station is now left open except for a retractable accordion steel gate.

The larger addition to the southwest that houses the exhibit room has two entries. The southwest entry has a door made of wooden slabs fastened together by tongue-and-groove construction and adorned by hand-forged strap hinges and decorative metal studs. This door might have been made when construction was still active at the Ranch, but never used as originally intended. The southeast entrance has a wooden door with two vertical upper lights and full-length sidelights.

- b. Windows: The larger addition that houses the exhibit space has an almost continuous series of large wooden multiple-sash windows. When it was remodeled for exhibit purposes the windows were blocked off. The Service Station has only one steel-sash window with two vertical lights.

6. Roof:

- a. Shape, covering: The Service Station has a hip roof that is covered with red clay tiles. At its peak there is a bird loft covered with multi-colored ceramic tiles. The Gas Tank House has a gable roof with opposite sides of unequal length, also covered with red clay tile.

The two additions have gable roofs and are covered with asphalt shingles.

- b. Cornice, eaves: The cornices of the Service Station/Gas Tank House have carved rafter ends. The additions have exposed rafter ends that have been left plain.

C. Description of Interior:

- 1. Floor plans: See measured drawings.
- 2. Flooring:

SE Addition - Linoleum tile.
Service Station - Carpet over concrete
Cas Tank House - Linoleum tile over concrete
NW Addition - Linoleum tile over concrete

- 3. Wall and Ceiling Finish:

Service Station/Cas Tank House - The walls have all been finished with a smooth white plaster. The open ceilings have "antiqued" wood rafters.

SE Addition - Plain finished lumber all painted a burgundy color.

DEATH VALLEY RANCH SERVICE
STATION/GAS TANK HOUSE
HABS No. CA-2257 G (Page 6)

NW Addition - The walls are made of concrete and have not been finished at all and still show the lines left by the planks of the forms. The roof is made of finished lumber all painted a burgundy color.

4. Doorways and doors:

From the SW Addition to the Gas Tank House - Large round arched opening with a moveable accordion steel gate separating the two rooms.

From Gas Tank House to NW Addition - Smaller round arched opening with no door.

5. Decorative Features: The SE addition has two large and ornate electric lights hanging from the ceiling made of tin. Miss Liddecoat bought these in Los Angeles and had them installed.

The Service Station has a metal electric lantern that is suspended on four hand-forged iron rods. Each rod begins from a separate corner of the room and converges at the center. Each rod attaches onto a round metal plate that supports the hanging lantern.

D. Site:

1. General Setting and Orientation: The Service Station/Gas Tank House is built into a south-facing hillside. The building itself is oriented on a northwest to southeast axis and is therefore slightly askew in its relationship to most others. The area between the Service Station/Gas Tank House and the Cook House has been terraced with "jaspar rock" and planted with palm trees and oleander.
2. Historic Landscape Design: A large concrete retaining wall with tile coping, reaching twenty feet high but stepping down in height, connects this building with the Main House directly to the east. The wall opens just north of the Gas Tank House for a small flight of stairs that connects with a serpentine path paved with flagstone, which in turn leads up the hill to the Cook House. A second wall, approximately five feet high, starts at the southeast corner of the Service Station. It curves towards and then beside a road that leads up the hill to the Cook House. The concrete of the wall was formed and capped with tile but never plastered. A sixteen foot gap, flanked by large boulders, in the center of the wall was deliberately left out to allow for a watercourse that would descend through the wall from its origin from behind the Guest House on its way to the Swimming Pool.

PART III. PROJECT INFORMATION

The Scotty's Castle Recording Project at Death Valley National Monument, California, was undertaken during the summers 1987-89 by the Historic American Buildings Survey (HABS) division of the National Park Service, and co-sponsored by the Western Regional Office of the National Park Service. Principals involved were Robert J. Kapsch, Chief of HABS/HAER; Kenneth L. Anderson, AIA, Chief of HABS and project leader in 1987 and 1988; and Paul D. Dolinsky, Principal Architect of HABS and project leader in 1989.

The recording teams were supervised in the field by Marlys B. Thurber in 1987, John White in 1988, and Joseph D. Balachowski in 1989. The written documentation was prepared by Richard A. Bernstein of Cornell University in 1987.

PART IV. SOURCES OF INFORMATION

The repository of nearly all of the sources of information is the Reference Library and Preservation Office, Scotty's Castle, Death Valley National Monument, California. Individual references take the form of endnotes, as follows:

1. Letter from M. Roy Thompson to Albert M. Johnson dated November 17, 1927. Manuscript 7, box 5.
2. Letter from M. Roy Thompson to Albert M. Johnson dated January 14, 1928. Manuscript 7, box 6.
3. Letter from M. Roy Thompson to Albert M. Johnson dated December, 1, 1928. Manuscript 7, box 7.
4. Letters from M. Roy Thompson to Albert M. Johnson dated February 15 and 20, 1929. Manuscript 7, box 7.
5. Letter from M. Roy Thompson to Albert M. Johnson dated June 11, 1929. Manuscript 7, box 8.
6. Letter from M. Roy Thompson to Albert M. Johnson dated November 13, 1929. Manuscript 7, box 9.
7. Letter from M. Roy Thompson to Albert M. Johnson dated March 30, 1930. Manuscript 7, box 10.
8. Letter from M. Roy Thompson to Charles Alexander MacNeill dated April 15, 1930. Manuscript 7, box 11.

DEATH VALLEY RANCH SERVICE
STATION/CAS TANK HOUSE
HABS No. CA-2257 C (Page 8)

9. Letter from M. Roy Thompson to Albert M. Johnson dated February 13, 1931.
Manuscript 12, box 4.

10. The plans for the West Patio included a Service Yard, a Servant's Quarters, a Grotto, a Sunken Garden and Tea House and was originally meant to be built in between the Main House and Power House. It was only barely begun before all construction was halted in the summer of 1931. Although ideas and concepts for the West Patio were discussed as early as 1927, actual construction did not begin until 1931 and only a small portion of the foundation work was actually completed.

11. Conversation with Don Creech, August 1987.

12. See architectural drawings, catalogue nos. 21064 and 21077.

13. Two photographs dated January 17, 1931, show the construction of the tunnel in progress. Photo album no. 13,733, pages 89 and 90.

14. Conversations with Esy Fields and Don Creech, August 1987.

15. Conversation with Don Creech, August 1987.

16. Interview with Mary Liddecoat.

17. Letter from M. Roy Thompson to Albert M. Johnson dated May 6, 1929.
Manuscript 7, box 19.